

AMENDED CLAIMS

[received by the International Bureau on 1 March 2001 (01.03.01);
original claims 1-20 replaced by amended claims 1-9 (3 pages)]

1. A method of identifying an object having an identification means,
5 **characterized by**
receiving at a mobile station an authorization signal indicating a
point of time allowed for transmission of an identification request signal,
reading the object's identification data from the identification means
by transmitting said identification request signal by the mobile station's radio
10 transmitter, and receiving an identification signal by the mobile station's radio
receiver or by the mobile station's infrared receiver, and
identifying said object on the basis of the identification data included
in the identification signal.
2. A method as claimed in claim 1, **characterized by** the
further steps of
15 transmitting the identification data read by the mobile station with
the mobile station's radio transmitter via a base station in a mobile communi-
cation system to a data processing device in which data relating to said object
is stored, and
20 identifying said object by comparing the data stored in the data
processing device with said identification data.
3. A system comprising
a mobile switching centre (MSC),
a base station (BTS) communicating with the mobile switching cen-
25 tre,
a mobile station (MS, MS') comprising a radio transmitter (TRX) and
a radio receiver (TRX) for setting up a connection to the mobile switching cen-
tre via the base station,
an object (1) comprising an identification means (2) composed of a
30 tag comprising means for generating an identification signal including identi-
fication data in response to a predetermined identification request signal, and
a data processing device (3) in which data relating to said object is
maintained, **characterized in that**
said system comprises control means (BSC) for generating and
35 transmitting an authorization signal indicating a point of time allowed for

transmitting an identification request signal, and
 said mobile station (MS, MS') comprises
 means for reading said object's (1) identification data from the identification means (2):

5 - by transmitting an identification request signal with the mobile stations (MS) radio transmitter (TRX) at a point of time indicated by the authorization signal, and

- by receiving the identification data included in an identification signal with the mobile stations radio receiver (TRX) or with an infrared receiver (5), and

10 means for transmitting the read identification data with the mobile station's radio transmitter (TRX) over the radio path via the base station (BTS) further to said data processing device (3).

4. A system as claimed in claim 3, **characterized** in that said tag (2) is a passive tag comprising means for recovering energy from said identification request signal and means for generating said identification signal with said recovered energy.

5. A system as claimed in claim 3 or 4, **characterized** in that said tag comprises means for generating an RF frequency identification signal.

20 6. A system as claimed in claim 3 or 4, **characterized** in that said tag comprises means for generating an identification signal composed of an infrared signal.

7. A system as claimed in any one of claims 3 to 6, **characterized** in that

25 said control means (BSC) are arranged to generate and transmit said authorization signal in response to an inquiry signal received by the control means, and

said mobile station (MS) comprises means (TRX) for transmitting the inquiry signal to said control means (BSC).

30 8. A system as claimed in any one of claims 3 to 6, **characterized** in that

said system is a time division mobile communication system, in which the frequency channels used by the system are divided into timeslots,

35 said control means (BSC) are arranged to generate and transmit an authorization signal indicating the timeslot or timeslots allowed for the transmission of the identification request signal, and

said mobile station (MS) comprises means (TRX) for receiving the authorization signal from the control means (BSC) and for transmitting the identification request signal in the timeslot indicated by the authorization signal.

5

9. A mobile station comprising
a user interface (4), and

a radio transmitter (TRX) and a radio receiver (TRX) for setting up a connection to a base station (BTS) in a mobile communication system via radio signals, **characterized** in that the mobile station further comprises means for receiving an authorization signal transmitted by the base station (BTS) over the radio path,

means (TRX, 5) which, in response to measures carried out by the mobile station's user via the user interface (4), read identification data from an object's identification means (2), said means for reading the identification data are composed of the mobile station's (MS) radio transmitter (TRX), which at the point of time indicated by the authorization signal transmits a predetermined identification request signal, and of the mobile station's radio receiver (TRX) or of an infrared receiver (5), which receives an identification signal comprising the identification data, and

15

20

the mobile station (MS, MS') comprises means for transmitting the read identification data with said radio transmitter (TRX) to said base station.

sub-²₁₀
cont

100221 25811

CLAIMS

1. A method of identifying an object having an identification means,
characterized by

reading the object's identification data from the identification means
5 by a mobile station, and
identifying said object on the basis of the identification data read by
the mobile station.

2. A method as claimed in claim 1, **characterized** by said
10 identification means being composed of a bar code, whereby the object's
identification data is read from the identification means by a bar code reader
arranged in the mobile station.

3. A method as claimed in claim 1, **characterized** in that for
15 reading the object's identification data

a predetermined identification request signal is transmitted by the
mobile station,

an identification signal, generated by said identification means in
response to the identification request signal is received by the mobile station,
20 and

said object is identified on the basis of the identification data in-
cluded in the identification signal.

4. A method as claimed in claim 3, **characterized** by sending said identification request signal by the mobile station's radio transmitter, and receiving said identification signal by the mobile station's radio receiver.

5 5. A method as claimed in claim 3, **characterized** by transmitting said identification request signal by the mobile station's radio transmitter and receiving said identification signal by the mobile station's infrared receiver.

10 6. A method as claimed in claim 3, **characterized** by sending said identification request signal by the mobile station's infrared transmitter and receiving said identification signal by the mobile station's infrared receiver.

15 7. A method as claimed in any one of claims 1 to 6, **characterized** by the further steps of

transmitting the identification data read by the mobile station with the mobile station's radio transmitter via a base station in a mobile communication system to a data processing device in which data relating to said object is stored, and

20 identifying said object by comparing the data stored in the data processing device with said identification data.

8. A system comprising
a mobile switching centre (MSC),

a base station (BTS) communicating with the mobile switching centre,

a mobile station (MS, MS', MS'') comprising a radio transmitter (TRX) and a radio receiver (TRX) for setting up a connection to the mobile switching centre via the base station,

an object (1) comprising an identification means (2), and

a data processing device (3) in which data relating to said object is maintained, **characterized** in that said mobile station (MS, MS', MS'') comprises

means for reading said object's (1) identification data from the identification means (2), and

means for transmitting the read identification data with the mobile station's radio transmitter (TRX) over the radio path via the base station (BTS) further to said data processing device (3).

15

9. A system as claimed in claim 8, **characterized** in that said identification means is composed of a bar code, and that said mobile station (MS'') comprises a bar code reader (6) for reading the identification data from the identification means.

20

10. A system as claimed in claim 8, **characterized** in that said identification means is composed of a tag comprising means for generating an identification signal including identification data in response to a predetermined identification request signal, and

the mobile station's (MS, MS') means for reading the identification data include

means (TRX, 5) for transmitting said identification request signal, and

5 means (TRX, 5) for receiving the identification data included in said identification signal.

11. A system as claimed in claim 10, **characterized** in that the means for transmitting the identification request signal are composed of the mobile station's (MS) radio transmitter (TRX), and

said tag (2) is a passive tag comprising means for recovering energy from said identification request signal and means for generating said identification signal with said recovered energy.

15 12. A system as claimed in claim 10 or 11, **characterized** in that

said tag comprises means for generating an RF frequency identification signal, and

20 said mobile station's (MS) means for receiving the identification signal are composed of the mobile station's radio receiver (TRX).

13. A system as claimed in claim 10 or 11, **characterized** in that

said tag comprises means for generating an identification signal

composed of an infrared signal, and

said mobile station's (MS') means for receiving the identification signal are composed of an infrared receiver (5).

5 14. A system as claimed in any one of claims 11 to 13, **c h a r a c -**
t e r i z e d in that

the system comprises control means (BSC) which, in response to an inquiry signal received by the control means, generate and transmit a pre-determined authorization signal indicating the point of time allowed for trans-
10 mitting the identification request signal, and

said mobile station (MS) comprises means (TRX) for transmitting the inquiry signal to said control means (BSC), for receiving the authorization signal from the control means, and for transmitting the identification request signal at the point of time indicated by the authorization signal.

15 15. A system as claimed in any one of claims 11 to 13, **c h a r a c -**
t e r i z e d in that

said system is a time division mobile communication system, in which the frequency channels used by the system are divided into timeslots,

20 the mobile communication system comprises control means (BSC) for generating and transmitting a predetermined authorization signal indicating the timeslot or timeslots allowed for the transmission of the identification request signal, and

said mobile station (MS) comprises means (TRX) for receiving the

authorization signal from the control means (BSC) and for transmitting the identification request signal in the timeslot indicated by the authorization signal.

5 16. A mobile station comprising
a user interface (4), and
a radio transmitter (TRX) and a radio receiver (TRX) for setting up a connection to a base station (BTS) in a mobile communication system via radio signals, **characterized** in that

10 the mobile station comprises means (TRX, 5, 6) which, in response to measures carried out by the mobile station's user via the user interface (4), read identification data from an object's identification means (2), and

 the mobile station (MS, MS', MS'') comprises means for transmitting the read identification data with said radio transmitter (TRX) to said base station.
15

 17. A mobile station as claimed in claim 16, **characterized** in that said means for reading the identification data are composed of a bar code reader (6).

20

 18. A mobile station as claimed in claim 16, **characterized** in that said means for reading the identification data are composed of the mobile station's (MS) radio transmitter (TRX), which transmits a predetermined identification request signal, and of the mobile station's radio receiver (TRX),

which receives an identification signal comprising the identification data.

19. A mobile station as claimed in claim 16, **characterized** in that said means for reading the identification data are composed of the mobile station's radio transmitter (TRX), which transmits a predetermined identification request signal, and of an infrared receiver (5), which receives an identification signal, which is transmitted via infrared signals and includes said identification data.

10 20. A mobile station as claimed in any one of claims 18 to 19, **characterized** in that the mobile station further comprises means for receiving an authorization signal transmitted by the base station (BTS) over the radio path, and that the mobile station's radio transmitter (TRX) transmits said identification request signal at the point of time indicated by the authorization signal.

15